

REMARKS

Claim 1 was objected to for using the word "directly" twice in a redundant arrangement. This Claim has been amended to delete one of the words.

Claim 1 was further objected to as not providing adequate interpretation as to how the message is "passed". This Claim has now further been amended to make it clear that a message is passed directly without passing through each of the functional layers.

Claim 5 was objected to because of the uncertain meaning of the phrase "without stepping through." This Claim has been amended to remove any uncertainty.

Claims 1-10 were rejected under 35 U.S.C. 102(e) as being anticipated by McGowan, *et al.* (U.S. Patent No. 5,937,345).

The present invention applies to a Global System for Mobile (GSM) communication system shown in Fig. 1 of the patent application as originally filed. A GSM communication system is composed of three layers. The third layer, known as the network layer, is further composed of three functional layers performing distinct tasks: a Connection Management (CM) layer, a Mobility Management (MM) layer, and a Radio Resource management (RR) layer. The CM functional layer is divided into a Call Control (CC), Supplementary Services (SS), and Short Message Service (SMS) sublayers.

Network layer messages traveling in either the uplink or downlink directions must pass through each of the functional layers. When a Mobile Station (MS) moves rapidly such as in an automobile, however, the delay caused by passing a message through each of the network layers may result in delays in setting up and placing calls. The present invention addresses the delay problem in an uplink message by first examining the message to determine its destination functional layer and then routing that message to the respective functional layer. For a downlink message, the message is passed directly from a functional layer to a second layer of the GSM communication system as shown in Fig. 3 of the patent application as originally filed.

In contrast, McGowan, *et al.* teach control points associated with each of the functional layers including control points associated with each of the CM sublayers which determine whether a message from a MS is appropriate for interception. If so, the message is sent to a

special call interception layer which routes the message to a destination. In fact, McGowan, *et al.* expressly state that a message still passes through each of the CM, RR, and MM functional layers (See col.5, line 64 through col.6, line 2). Fig. 5 of the McGowan, *et al.* patent also demonstrates the same.

Fig. 6 of the McGowan, *et al.* patent does show a control message 604 that passes from an RR layer 414 to his call interception layer 412. However, that message is not intended to be sent to the CC layer 418.

As discussed above, McGowan, *et al.* do not teach “examining a network layer message to determine . . . whether it is associated with” one of the functional layers and “routing the message directly to the respective” functional layer “without passing the message through each of the” network layers as stated in currently amended independent Claim 1. Therefore, Applicants submit that independent Claim 1 should be allowed.

Since Claims 2 through 4 depend from Claim 1, these claims should be allowed for at least the same reasons.

As discussed above, McGowan, *et al.* also do not teach “processing downlink network layer messages . . . such that the network layer messages do not pass through other layer protocol stacks” as stated in currently amended independent Claim 5. Therefore, Applicants submit that independent Claim 5 should be allowed.

Since Claims 6 through 10 depend from Claim 5, these claims should be allowed for at least the same reason.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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